Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-4, 8-12, 14-18, 20-24 and 26 are pending in the application, with claims 1 and 15 being the independent claims. Claims 17, 20, and 21 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. Claims 1, 15, and 18 are sought to be amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

This Amendment after Final Rejection at least places this application in better form for appeal and should only require a cursory review because the claim amendments presented herein do not add any new features and/or do not significantly alter the scope of the claims. Accordingly, entry of the present Amendment is requested under 37 C.F.R. §1.116.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Objection to the Claims

In the Office Action, claims 1 and 15 were objected to for alleged informalities. Claims 1 and 15 have been amended to overcome these objections. Accordingly, Applicants respectfully request that the objection of claims 1 and 15 be reconsidered and withdrawn.

Rejections Under 35 U.S.C. § 103

Claims 1, 3, 4, 8-12, and 14

Claims 1, 3, 4, 8-12, and 14 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,978,830 to Nakaya et al. ("Nakaya") in view of U.S. Patent No. 6,175,890 to Yamaura ("Yamaura") and U.S. Patent No. 6,145,017 to Ghaffari ("Ghaffari").

For a rejection to be legally adequate under 35 U.S.C. § 103, every claim feature must be taught, or be obvious to person of ordinary skill in the art, in the combination of the references. *See Orthopedic Equipment, Inc. v. United States*, 702 F.2d 1005, 1013 (Fed. Cir. 1983). Independent claim 1 recites, among other features, "wherein moving the first interrupt indicator comprises setting the first interrupt indicator associated with the younger control record to disabled and setting the second interrupt indicator associated with the older control record to enabled."

Thus, moving the first interrupt indicator, as explicitly claimed, comprises a two step process: (1) setting the first interrupt indicator associated with the younger control record to disabled; and (2) setting the second interrupt indicator associated with the older control record to enabled.

The Examiner explicitly states that Nakaya fails to disclose *each* of these two steps that comprise the claimed moving process noted above. Specifically, the Examiner states that Nakaya "does not explicitly disclose...that moving the first interrupt indicator comprises setting the first interrupt indicator associated with the younger control record to disabled and setting the second interrupt associated with the older control record to enabled." (Office Action, page 6.) Applicants respectfully submit that, without teaching

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either of these two specific steps, Nakaya cannot possible teach or suggest moving a first interrupt indicator as claimed.

In the Response to Argument section of the Office Action, the Examiner states that:

> As further discussed in claim 4, dependent from claim 1, "moving the first interrupt indicator comprises delaying the generation of an interrupt with the younger control record." Since Applicant has noted that Nakaya "discloses parallel computer parts that delay the issuance of an interrupt until all of the multiple parallel computer parts (e.g., U2 through U6) are finished," one will readily see that Nakaya discloses moving an interrupt indicator onto another, wherein such moving comprises delaying the generation of an interrupt.

Even if we assume, for the sake of argument, that the feature of dependent claim 4 was, in fact, incorporated into independent claim 1, Nakaya still does not teach or suggest either of the two steps that comprise the claimed moving process noted above. In other words, even if the features of claim 1 and Nakaya both achieve the same result (i.e., delaying an interrupt), the methods used to achieve the result in each instance are not necessarily equivalent or obvious in light of the other.

Yamaura does not cure the deficiencies of Nakaya. Yamaura discloses an interrupt controller "that is provided as an adaptor device coupled to a microprocessor." (Yamaura, 4:59-64.) The interrupt controller functions to "enable multiple interrupt requests" that otherwise would not have been acceptable to the microprocessor. (*Id.*) Specifically, the interrupt controller utilizes an internal register that includes a mask flag to disable/enable individual interrupt requests such that the microprocessor can react to particular interrupts. (Yamaura, 5-7.)

Yamaura, at most, discloses disabling/enabling interrupt requests using mask flags. However, Yamaura, like Nakaya does not disclose ***moving a first interrupt***

indicator, "wherein moving the first interrupt indicator comprises setting the first interrupt indicator associated with the younger control record to disabled and setting the second interrupt indicator associated with the older control record to enabled." This two step moving process is simply not disclosed by Yamaura.

Ghaffari further does not cure the deficiencies of Nakaya and Yamaura. Ghaffari discloses the use of a single bit, command chaining field that is "used to indicate that [a] present command can be chained with at least one subsequent command." Specifically, Ghaffari describes that typically after a data operation associated with a particular command has completed successfully, "an interrupt is generated to notify [a] local processor." (Ghaffari, 9:7-10.) However, if the bit in the command chaining field is clear, then no command complete interrupt is generated and a subsequent data operation is processed. (Ghaffari, 9:13-16.) In this way, Ghaffari purports that the number of command complete interrupts generated can be reduced. (Ghaffari, 9:16-20.)

Although Ghaffari discloses a command chaining field to reduce the number of generated interrupts, this portion of Ghaffari (or any other portion of Ghaffari for that matter) similarly does not disclose *moving a first interrupt indicator*, "wherein moving the first interrupt indicator comprises setting the first interrupt indicator associated with the younger control record to disabled and setting the second interrupt indicator associated with the older control record to enabled" as recited in claim 1.

For the reasons set forth above, the combination of Nakaya, Yamaura, and Ghaffari cannot render claim 1 unpatentable. Claims 3, 4, 8-12, and 14 are similarly not rendered unpatentable by the combination of Nakaya, Yamaura, and Ghaffari for the same reasons as independent claim 1, from which they depend, and further in view of their own respective features. Furthermore, dependent claims 6 and 7 have been

cancelled by the above amendment, thereby rendering the rejection of those claims moot. Accordingly, Applicants respectfully request that the rejection of claims 1, 3, 4, 6-12, and 14 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 2, 15-18, 20-24, and 26

The Examiner has rejected claims 2, 15,-18, 20-24, and 26 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakaya in view of Yamaura ("Yamaura") Ghaffari, and in view of Pierson et al., "Context-Agile Encryption for High Speed Communication Networks" ("Pierson"). For the reasons set forth below, Applicants respectfully traverse.

Pierson does not in anyway remedy the deficiencies of Nakaya, Yamaura, and Ghaffari with respect to independent claim 1, as discusses above. Consequently, the combination of Nakaya, Yamaura, Ghaffari, and Pierson cannot render independent claim 1 unpatentable. Claim 2 is similarly not rendered unpatentable by the combination of Nakaya, Yamaura, Ghaffari, and Pierson for the same reasons as independent claim 1, from which it depends, and further in view of its own respective feature. Accordingly, Applicants respectfully request that the rejection of claim 2 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Independent claim 15 is directed to a cryptography accelerator that includes the feature of "wherein moving the first interrupt indicator comprises setting the first interrupt indicator associated with the younger control record to disabled and setting the second interrupt indicator associated with the older control record to enabled." As noted above in regard to claim 1, Nakaya, Yamaura, and Ghaffari do not teach or suggest this feature. Pierson does not cure the deficiencies of Nakaya, Yamaura, and Ghaffari. Consequently, the combination of Nakaya, Yamaura, Ghaffari, and Pierson cannot

render independent claim 15 unpatentable. Claims 16, 18, 22-24, and 26 are similarly not rendered unpatentable by the combination of Nakaya, Yamaura, Ghaffari, and Pierson for the same reasons as independent claim 15, from which they depend, and further in view of their own respective features. Accordingly, Applicants respectfully request that the rejection of claims 15-18, 22-24, and 26 under 35 U.S.C § 103(a) be reconsidered and withdrawn.

Dependent claims 17, 20, and 21 have been cancelled by the above amendment, thereby rendering the rejection of those claims moot.
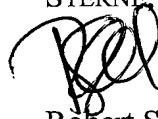
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Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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